



DEPARTMENT OF REGULATORY AND ECONOMIC RESOURCES (RER)
BOARD AND CODE ADMINISTRATION DIVISION

MIAMI-DADE COUNTY
PRODUCT CONTROL SECTION

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www.miamidade.gov/economy

NOTICE OF ACCEPTANCE (NOA)

Polyglass USA, Inc.
1111 W. Newport Center Drive
Deerfield Beach, FL 33442

SCOPE:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed and accepted by Miami-Dade County RER - Product Control Section to be used in Miami Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Section (In Miami Dade County) and/or the AHJ (in areas other than Miami Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. RER reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Section that this product or material fails to meet the requirements of the applicable building code.

This product is approved as described herein, and has been designed to comply with the Florida Building Code including the High Velocity Hurricane Zone of the Florida Building Code.

DESCRIPTION: Polyglass Modified Bitumen Roof System Over Steel Decks

LABELING: Each unit shall bear a permanent label with the manufacturer's name or logo, city, state and following statement: "Miami-Dade County Product Control Approved", unless otherwise noted herein.

RENEWAL of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

TERMINATION of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

ADVERTISEMENT: The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

INSPECTION: A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This NOA revises NOA# 13-1217.06 and consists of pages 1 through 35.
The submitted documentation was reviewed by Alex Tigera.


10/12/16



NOA No.: 15-0928.06
Expiration Date: 07/13/18
Approval Date: 10/06/16
Page 1 of 35

ROOFING ASSEMBLY APPROVAL

Category:	Roofing
Sub-Category:	Modified Bitumen
Materials	SBS/APP
Deck Type:	Steel
Maximum Design Pressure	-112.5 psf

TRADE NAMES OF PRODUCTS MANUFACTURED OR LABELED BY APPLICANT:

TABLE 1

<u>Product</u>	<u>Dimensions</u>	<u>Test Specification</u>	<u>Product Description</u>
Polyglass G2 Base	108' x 36"	ASTM D 4601 Type II	Asphalt-coated fiberglass reinforced base sheet
Elastobase	65' 8" x 3' 3-3/8"	ASTM D 6163	SBS modified asphalt coated fiberglass reinforced base sheet.
Elastoflex SA V	66' 8" x 3' 3-3/8"	ASTM D 6163	Self-adhered, fiberglass reinforced, SBS modified bitumen membrane with a self-adhering back face and a smooth top surface.
Elastoflex SA V FR	66' 8" x 3' 3-3/8"	ASTM D 6163	Self-adhered, fire-rated, fiberglass reinforced, SBS modified bitumen membrane with a self-adhering back face and a smooth top surface.
Elastoflex SA V PLUS	66' 8" x 3' 3-3/8"	ASTM D 6163	Self-adhered, fiberglass reinforced, SBS modified bitumen membrane with a self-adhering back face and a smooth top surface.
Elastoflex SA V PLUS FR	66' 8" x 3' 3-3/8"	ASTM D 6163	Self-adhered, fiberglass reinforced, SBS modified bitumen membrane with a fire retardant additive, self-adhering back face and a smooth top surface.
Elastoflex V	32' 10" x 3' 3-3/8"	ASTM D 6163	Torch, hot asphalt or cold adhesive applied, fiberglass reinforced, SBS modified bitumen membrane with a burn off polyethylene or sanded back face and a sanded top surface.
Elastoflex VG	32' 10" x 3' 3-3/8"	ASTM D 6163	Torch, hot asphalt or cold adhesive applied, fiberglass reinforced, SBS modified bitumen membrane with a burn off polyethylene or sanded back face and a granule top surface.
Elastoflex VG FR	32' 10" x 3' 3-3/8"	ASTM D 6163	Torch, hot asphalt or cold adhesive applied, fire-rated, fiberglass reinforced, SBS modified bitumen membrane with a burn off polyethylene or sanded back face and a granule top surface and fire retardant chemistry.
Polyglass HT Base 650	65' 8" x 3' 3-3/8"	ASTM D 6163	SBS modified asphalt coated fiberglass reinforced base sheet.

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TABLE 1

<u>Product</u>	<u>Dimensions</u>	<u>Test Specification</u>	<u>Product Description</u>
XtraFlex SBS Base SA	66' 8" x 3' 3-3/8"	ASTM D 6163	Self-adhered, fiberglass reinforced, SBS modified bitumen membrane with a self-adhering back face and a smooth top surface.
XtraFlex SBS Base SA	66' 8" x 3' 3-3/8"	ASTM D 6163	Self-adhered, fiberglass reinforced, SBS modified bitumen membrane with a self-adhering back face and a smooth top surface.
XtraFlex SBS Glass Base	65' 8" x 3' 3-3/8"	ASTM D 6163	SBS modified asphalt coated fiberglass reinforced base sheet.
XtraFlex SBS Glass Interply	32' 10" x 3' 3-3/8"	ASTM D 6163	Torch, hot asphalt or cold adhesive applied, fiberglass reinforced, SBS modified bitumen membrane with a burn off polyethylene or sanded back face and a sanded top surface.
XtraFlex SBS HT Base 650	65' 8" x 3' 3-3/8"	ASTM D 6163	SBS modified asphalt coated fiberglass reinforced base sheet.
Elastobase P	65' 2" x 3' 3-3/8"	ASTM D 6164	SBS modified asphalt coated polyester reinforced base sheet.
Elastoflex S6	32' 10" x 3' 3-3/8"	ASTM D 6164	Torch, hot asphalt or cold adhesive applied, polyester reinforced, SBS modified bitumen membrane with a burn off polyethylene or sanded back face and a polyethylene or sanded top surface.
Elastoflex S6 G	32' 10" x 3' 3-3/8"	ASTM D 6164	Torch, hot asphalt or cold adhesive applied, polyester reinforced, SBS modified bitumen membrane with a burn off polyethylene or sanded back face and a granule top surface.
Elastoflex S6 G FR	32' 10" x 3' 3-3/8"	ASTM D 6164	Torch, hot asphalt or cold adhesive applied, polyester reinforced, SBS modified bitumen membrane with a burn off polyethylene or sanded back face and a granule top surface and fire retardant chemistry.
Elastoshield TSG	32' 10" x 3' 3-3/8"	ASTM D 6164	Torch, hot asphalt or cold adhesive applied, polyester reinforced, SBS modified bitumen membrane with a burn off polyethylene or sanded back face and a granule top surface.
Elastoshield TSG FR	32' 10" x 3' 3-3/8"	ASTM D 6164	Torch, hot asphalt or cold adhesive applied, polyester reinforced, SBS modified bitumen membrane with a burn off polyethylene or sanded back face and a granule top surface and fire retardant chemistry.
Polyfresko G SBS	32' 10" x 3' 3-3/8"	ASTM D 6164	Torch, hot asphalt or cold adhesive applied, polyester reinforced, SBS modified bitumen membrane with a burn off polyethylene or sanded back face and a granule top surface.

TRADE NAMES OF PRODUCTS MANUFACTURED OR LABELED BY APPLICANT:

TABLE 1

<u>Product</u>	<u>Dimensions</u>	<u>Test Specification</u>	<u>Product Description</u>
Polyfresko G SBS FR	32' 10" x 3' 3-3/8"	ASTM D 6164	Torch, hot asphalt or cold adhesive applied, polyester reinforced, SBS modified bitumen membrane with a burn off polyethylene or sanded back face and a granule top surface and fire retardant chemistry.
XtraFlex SBS Poly Base	32' 10" x 3' 3-3/8"	ASTM D 6164	Torch, hot asphalt or cold adhesive applied, polyester reinforced, SBS modified bitumen membrane with a burn off polyethylene or sanded back face and a polyethylene or sanded top surface.
XtraFlex SBS Poly G	32' 10" x 3' 3-3/8"	ASTM D 6164	Torch, hot asphalt or cold adhesive applied, fire-rated, polyester reinforced, SBS modified bitumen membrane with a burn off polyethylene or sanded back face and a granule top surface and fire retardant chemistry.
Polybond	32' 10" x 3' 3-3/8"	ASTM D 6222	Torch applied, polyester reinforced, APP modified bitumen membrane with a burn off polyethylene back face and a smooth or sanded top surface.
Polybond G	32' 10" x 3' 3-3/8"	ASTM D 6222	Torch applied, polyester reinforced, APP modified bitumen membrane with a burn off polyethylene back face and a granule top surface.
Polyflex	32' 10" x 3' 3-3/8"	ASTM D 6222	Torch applied, polyester reinforced, APP modified bitumen membrane with a burn off polyethylene back face and a smooth or sanded top surface.
Polyflex G	32' 10" x 3' 3-3/8"	ASTM D 6222	Torch applied, polyester reinforced, APP modified bitumen membrane with a burn off polyethylene back face and a granule top surface.
Polyflex G FR	32' 10" x 3' 3-3/8"	ASTM D 6222	Torch applied, polyester reinforced, APP modified bitumen membrane with a burn off polyethylene back face and a granule top surface and fire retardant chemistry.
Polyfresko G	32' 10" x 3' 3-3/8"	ASTM D 6222	Torch applied, polyester reinforced, APP modified bitumen membrane with a burn off polyethylene back face and a granule top surface.
Polyfresko G FR	32' 10" x 3' 3-3/8"	ASTM D 6222	Torch applied, fire-rated, polyester reinforced, APP modified bitumen membrane with a burn off polyethylene back face and a granule top surface and fire retardant chemistry.
XtraFlex APP G	32' 10" x 3' 3-3/8"	ASTM D 6222	Torch applied, fire-rated, polyester reinforced, APP modified bitumen membrane with a burn off polyethylene back face and a granule top surface and fire retardant chemistry.

TRADE NAMES OF PRODUCTS MANUFACTURED OR LABELED BY APPLICANT:

TABLE 1

<u>Product</u>	<u>Dimensions</u>	<u>Test Specification</u>	<u>Product Description</u>
XtraFlex APP S	32' 10" x 3' 3-3/8"	ASTM D 6222	Torch applied, polyester reinforced, APP modified bitum32 membrane with a burn off polyethylene back face and a smooth or sanded top surface.
XtraFlex Kool APP G	32' 10" x 3' 3-3/8"	ASTM D 6222	Torch applied, polyester reinforced, APP modified bitumen membrane with a burn off polyethylene back face and a granule top surface.
Polyglass APP Base	65' 8" x 3' 3-3/8"	ASTM D 6509	APP modified bitumen, fiberglass reinforced, base/ply sheet.
PG 100 Asphalt Primer	1, 3, 5, 50, 55 gal, tube or 17 oz. spray can	ASTM D 41	A penetrating solution of solvent and a blend of selected asphalts used to promote adhesion.
XtraFlex 10 Asphalt Primer	1, 3, 5, 50, 55 gal, tube or 17 oz. spray can	ASTM D 41	A penetrating solution of solvent and a blend of selected asphalts used to promote adhesion.
PG 325 Cold Process Adhesive	1, 3, 5, 50, 55 gal. or tube	ASTM D 3019 Type III	A fibered cold process adhesive for use with roll or BUR roofing.
PG 350 Mod Bit Adhesive	1, 3, 5, 50, 55 gal. or tube	ASTM D 3019 Type III	A fibered rubberized adhesive designed for use with modified bitumen membranes.
Polyplus 35 Premium Mod Bit Adhesive	1, 3, 5, 50, 55 gal. or tube	ASTM D 3019 Type III	A fibered rubberized adhesive designed for use with modified bitumen membranes.
XtraFlex 35 Premium Mod Bit Adhesive	1, 3, 5, 50, 55 gal. or tube	ASTM D 3019 Type III	A fibered rubberized adhesive designed for use with modified bitumen membranes.
PG 450 Flashing Cement	1, 3, 5, 50, 55 gal. or tube	ASTM D 4586	A thick, fibered, rubberized flashing cement.
PG 500 MB Flashing Cement	1, 3, 5, 50, 55 gal. or tube	ASTM D 4586	A thick, fibered, rubberized flashing cement for use with modified bitumen membranes.
Polyplus 45 Premium Flashing Cement	1, 3, 5, 50, 55 gal. or tube	ASTM D 4586	A thick, fibered, rubberized flashing cement.
Polyplus 50 Premium MB Flashing Cement	1, 3, 5, 50, 55 gal. or tube	ASTM D 4586	A thick, fibered, rubberized flashing cement for use with modified bitumen membranes.
Polyplus 55 Premium Modified Flashing Cement	1, 3, 5, 50, 55 gal. or tube	ASTM D 4586	A mastic compound for use as a roof flashing adhesive.
XtraFlex 50 Premium Modified Wet/Dry Cement	1, 3, 5, 50, 55 gal. or tube	ASTM D 4586	A thick, fibered, rubberized flashing cement for use with modified bitumen membranes.
PG 400 Plastic Roof Cement	1, 3, 5, 50, 55 gal. or tube	ASTM D 4586 ASTM D 3409	A thick, fibered, rubberized flashing cement for use in dry or damp conditions.
PG 425 Wet/Dry Plastic Roof Cement	1, 3, 5, 50, 55 gal. or tube	ASTM D 4586 ASTM D 3409	A thick, fibered, rubberized flashing cement for use in dry or damp conditions.

APPROVED INSULATIONS:**TABLE 2**

<u>Product Name</u>	<u>Product Description</u>	<u>Manufacturer</u> <u>(With Current NOA)</u>
Polytherm	Polyisocyanurate foam insulation	Polyglass USA, Inc.
Polytherm Composite	Polyisocyanurate/perlite composite insulation.	Polyglass USA, Inc.
Polytherm-H	Polyisocyanurate foam insulation	Polyglass USA, Inc.
ACFoam-II	Polyisocyanurate foam insulation	Atlas Roofing Corporation
ACFoam-III	Polyisocyanurate foam insulation	Atlas Roofing Corporation
ACFoam Composite	Polyisocyanurate/perlite composite insulation	Atlas Roofing Corporation
DensDeck, DensDeck Prime	Gypsum insulation board	Georgia-Pacific Gypsum LLC
H-Shield	Polyisocyanurate foam insulation	Hunter Panels, LLC
H-Shield-CG	Polyisocyanurate/perlite composite insulation	Hunter Panels, LLC
ENRGY 3	Polyisocyanurate foam insulation	Johns Manville Corp.
FescoBoard	Expanded mineral fiber	Johns Manville Corp.
Structodek High Density Fiberboard Roof Insulation	Wood fiber board	Blue Ridge Fiberboard, Inc.
SECUROCK Gypsum-Fiber Roof Board	Fiber reinforced coverboard	United States Gypsum Corporation
Multi-Max FA-3	Polyisocyanurate foam insulation	Rmax Operating, LLC
ISO 95 + GL	Polyisocyanurate foam insulation	Firestone Building Products Company, LLC.
EnergyGuard Polyiso Insulation	Polyisocyanurate foam insulation	GAF

APPROVED FASTENERS:

TABLE 3

<u>Fastener Number</u>	<u>Product Name</u>	<u>Product Description</u>	<u>Dimensions</u>	<u>Manufacturer (With Current NOA)</u>
1.	Polygrip Fasteners #12, #14 & #15	Insulation fastener for wood, steel and concrete decks		Polyglass USA, Inc.
2.	Polygrip Hex Plate	Galvalume hex stress plate.	2 7/8" x 3 1/4"	Polyglass USA, Inc.
3.	Dekfast 12, 14 & 15 HS	Insulation fastener for wood, steel and concrete decks		SFS Intec, Inc.
4.	Dekfast Galvalume Steel Hex	Galvalume hex stress plate.	2 7/8" x 3 1/4"	SFS Intec, Inc.
5.	#12 Standard Roofgrip, #14 Roofgrip & #15 Roofgrip	Insulation fastener for wood, steel and concrete decks.		OMG, Inc.
6.	3 in. Round Metal Plate	Galvalume stress plate.	3" round 3" square	OMG, Inc.
7.	Flat Bottom Metal Plate	Galvalume stress plate.	3" square	OMG, Inc.
8.	Dekfast Isofast IF-2.375-AT Plates	Galvalume AZ55 steel plate	2.37" round	SFS Intec
9.	Trufast #14 HD Fastener	Insulation fastener for wood, steel and concrete decks		Altenloh, Brinck & Co. U.S. Inc.
10.	Trufast 3" Recessed Metal Plate, Trufast 3" TL Insulation Plate	3" round galvalume AZ55 steel plate	3" round	Altenloh, Brinck & Co. U.S. Inc.
11.	Trufast 3" Metal Insulation Plate	Round galvalume AZ50 steel plate	3" round	Altenloh, Brinck & Co. U.S. Inc.
12.	Trufast #15 EHD Fastener	Insulation fastener for wood, steel and concrete decks		Altenloh, Brinck & Co. U.S. Inc.
13.	Dekfast Isofast IFC/IW-70x70	Galvalume 19 ga. steel insulation and membrane attachment stress plate	2 3/4" x 2 3/4"	SFS Intec, Inc.
14.	Trufast 2.4" Scoop Seam Plate	Galvalume steel stress plate.	2.4" round	Altenloh, Brinck & Co. U.S. Inc.
15.	Trufast 2.4 Barbed Metal Seam Plate	Galvalume steel stress plate.	2.4" round	Altenloh, Brinck & Co. U.S. Inc.
16.	Trufast 2-3/4" Barbed Metal Seam Plate	Galvalume steel stress plate.	2.75" round	Altenloh, Brinck & Co. U.S. Inc.
17.	Dekfast Galvalume Steel Round 2 3/8" 20-Ga Barbed Plate	Galvalume steel stress plate.	2.37" round	SFS Intec, Inc.

APPROVED SURFACING:**TABLE 4****Chosen components must be applied according to manufacturer's application instructions.**

<u>Number</u>	<u>Product Name</u>	<u>Product Description</u>	<u>Application Rate</u>	<u>Specification</u>	<u>Manufacturer</u>
1.	Gravel	To be installed in a flood coat of approved asphalt at 60 lbs/sq	400 lbs/sq	N/A	Generic
2.	Slag	To be installed in a flood coat of approved asphalt at 60 lbs/sq	300 lbs/sq	N/A	Generic
3.	KM Acryl 15	A premium white elastomeric acrylic based roof coating (water-based). A polyester fabric may be used for reinforcement with this coating.	1-1½ gal/sq	ASTM D6083	KM Coatings Manufacturing
4.	KM Acryl 15 QS	A premium white quick setting, elastomeric acrylic based roof coating (water-based). A polyester fabric may be used for reinforcement with this coating.	1-1½ gal/sq	ASTM D6083	KM Coatings Manufacturing
5.	KM Acryl 25	A premium white elastomeric acrylic based roof coating (water-based). A polyester fabric may be used for reinforcement with this coating.	1-1½ gal/sq	ASTM D6083	KM Coatings Manufacturing
6.	KM Acryl 25 QS	A premium white quick setting, elastomeric acrylic based roof coating (water-based). A polyester fabric may be used for reinforcement with this coating.	1-1½ gal/sq	ASTM D6083	KM Coatings Manufacturing
7.	PS #220	A single component, solvent, moisture cure silicone coating.	1.25 gal/sq	ASTM D6694	KM Coatings Manufacturing
8.	PS #250	A premium grade high solids, single component, moisture cure, fluid applied silicone coating	1.25 gal/sq	ASTM D6694	KM Coatings Manufacturing
9.	PG 200 Non-Fibered Roof Coating	A non fibered asphaltic coating used to add life and rejuvenate existing BUR roofing substrates.	1½-2 gal/sq	TAS 140	Polyglass USA, Inc.

APPROVED SURFACING:**TABLE 4****Chosen components must be applied according to manufacturer's application instructions.**

<u>Number</u>	<u>Product Name</u>	<u>Product Description</u>	<u>Application Rate</u>	<u>Specification</u>	<u>Manufacturer</u>
10.	PG 300 Fibered Roof Coating	An asphalt cutback fibered roof coating. May be applied by brush or spray equipment to rejuvenate aged BUR	1½-2 gal/sq	ASTM D4479	Polyglass USA, Inc.
11.	PG 600 Non-Fibered Aluminum Roof Coating	Non-fibered aluminum roof coating.	½-1 gal/sq	ASTM D2824 Type I	Polyglass USA, Inc.
12.	PG 650 Fibered Aluminum Roof Coating	Fibered aluminum roof coating.	1½-2 gal/sq	ASTM D2824 Type III	Polyglass USA, Inc.
13.	PG 700 Elastomeric Roof Coating	A premium white elastomeric acrylic based roof coating (water-based). A polyester fabric may be used for reinforcement with this coating.	1-1½ gal/sq	ASTM D6083	Polyglass USA, Inc.
14.	PG 700 QS Elastomeric Roof Coating	A premium white quick setting, elastomeric acrylic based roof coating (water-based). A polyester fabric may be used for reinforcement with this coating.	1-1½ gal/sq	ASTM D6083	Polyglass USA, Inc.
15.	PG 800 Non-Fibered Asphalt Emulsion Roof Coating	An asphalt based, non-fibered clay emulsion	3 gal/sq in two coats	ASTM D1227	Polyglass USA, Inc.
16.	Polybrite 70 Premium Grade Elastomeric Roof Coating	A premium white elastomeric acrylic based roof coating (water-based). A polyester fabric may be used for reinforcement with this coating.	1-1½ gal/sq	ASTM D6083	Polyglass USA, Inc.
17.	Polybrite 70 QS Premium Grade Elastomeric Roof Coating	A premium white quick setting, elastomeric acrylic based roof coating (water-based). A polyester fabric may be used for reinforcement with this coating.	1-1½ gal/sq	ASTM D6083	Polyglass USA, Inc.
18.	Polybrite 90 High Solids Silicone Roof Coating	A premium grade high solids, single component, moisture cure, fluid applied silicone coating	1.25 gal/sq	ASTM D6694	Polyglass USA, Inc.
19.	Polybrite 95 Silicone Roof Coating	A single component, solvent, moisture cure silicone coating.	1.25 gal/sq	ASTM D6694	Polyglass USA, Inc.

APPROVED SURFACING:**TABLE 4****Chosen components must be applied according to manufacturer's application instructions.**

<u>Number</u>	<u>Product Name</u>	<u>Product Description</u>	<u>Application Rate</u>	<u>Specification</u>	<u>Manufacturer</u>
20.	Polyplus 60 Premium Non-Fibred Aluminum Roof Coating	Non-fibred aluminum roof coating.	½-1 gal/sq	ASTM D2824 Type I	Polyglass USA, Inc.
21.	Polyplus 65 Premium Fibred Aluminum Roof Coating	Fibred aluminum roof coating.	1½-2 gal/sq	ASTM D2824 Type III	Polyglass USA, Inc.
22.	XtraFlex 20 Bituminous Roof Coating	A non fibred asphaltic coating used to add life and rejuvenate existing BUR roofing substrates.	1½-2 gal/sq	TAS 140	Polyglass USA, Inc
23.	XtraFlex 60 Aluminum Roof Coating	Non-fibred aluminum roof coating.	½-1 gal/sq	ASTM D2824 Type I	Polyglass USA, Inc.
24.	XtraFlex 65 Aluminum Roof Coating Fibred	Fibred aluminum roof coating.	1½-2 gal/sq	ASTM D2824 Type III	Polyglass USA, Inc.
25.	XtraFlex 70 Premium Acrylic FR Roof Coating	A premium white elastomeric acrylic based roof coating (water-based). A polyester fabric may be used for reinforcement with this coating.	1-1½ gal/sq	ASTM D6083	Polyglass USA, Inc.
26.	XtraFlex 80 Emulsion Roof Coating	An asphalt based, non-fibred clay emulsion	3 gal/sq in two coats	ASTM D1227	Polyglass USA, Inc.
27.	XtraFlex Bituminous Roof Coating Fibred	An asphalt cutback fibred roof coating. May be applied by brush or spray equipment to rejuvenate aged BUR	1½-2 gal/sq	ASTM D4479	Polyglass USA, Inc.
28.	XtraFlex SRC 8000 Silicone Roof Coating	A single component, solvent, moisture cure silicone coating.	1.25 gal/sq	ASTM D6694	Polyglass USA, Inc.
29.	XtraFlex SRC 9600 High Solids Silicone Roof Coating	A premium grade high solids, single component, moisture cure, fluid applied silicone coating	1.25 gal/sq	ASTM D6694	Polyglass USA, Inc.

EVIDENCE SUBMITTED:

<u>Test Agency</u>	<u>Test Name/Report</u>	<u>Report No.</u>	<u>Date</u>
Factory Mutual Research Corporation	4470	2W7A7.AM	08/04/94
	447 0	3000857	01/12/00
	4470	3004091	01/12/00
	4470	3001334	02/15/00
	4450	3023458	07/18/06
	4470	RR202591	10/22/15
Underwriters Laboratory	TAS 114	00NK20869	06/08/00
	UL 790	R14571	06/30/15
Trintiy ERD	TAS 114	11776.06.02	01/16/03
	TAS 117(B)-ASTM D6862	C8500SC.11.07	11/30/07
	ASTM D 6164 / D 6222	P10490.10.08-R1	10/03/08
	ASTM D6163 / ASTM D 4601	P33960.03.11	03/15/11
	FM 4470 & TAS 114	P33970.03.11	03/15/11
	ASTM D6164	P37590.03.13-3A	03/06/13
	TAS 114	11757.12.00-1-R1	04/29/13
	TAS 114	11757.04.01-1-R1	04/30/13
	ASTM D6509	P37590.03.13-1-R1	06/26/13
	ASTM D6222	P37590.07.13-2	07/01/13
	ASTM D6222	P37590.03.13-5-R1	07/01/13
	ASTM D6163	P37590.03.13-2-R1	07/01/13
	ASTM D6164	P37590.07.13-1	07/02/13
	FM 4470 & TAS 114	SC6160.11.14	11/10/14
	ASTM D6162	SC5170.05.15	05/08/15
	ASTM D6162	SC5170.12.15-1	12/29/15
	ASTM D6163	PLYG-P45440SC.03.15-2-R1	12/29/15
	ASTM D6163	PLYG-P45440SC.03.15-1-R1	02/19/16
	FM 4474, UL1897, TAS 114	PLYG-SC8905.05.16-1	05/17/16
	FM 4474, UL1897, TAS 114	PLYG-SC8905.05.16-2	05/17/16
	TAS 114 & FM 4474	PLYG-SC10815.07.16	07/18/16
PRI Asphalt Technologies	ASTM D6222	PUSA-062-02-01	12/04/07
	ASTM D6163	PUSA-064-02-02	02/27/08
	ASTM D6694	PUSA-134-02-01	05/16/14
	ASTM D6694	PUSA-135-02-01	05/16/14

DECK STRESS ANALYSIS CALCULATIONS/REPORTS

<u>Engineer/Agency</u>	<u>Identifier</u>	<u>Assemblies</u>	<u>Date</u>
Factory Mutual Research Corp.	RoofNav Listings	C(1), D(6), D(7)	08/17/16
Robert Nieminen, P.E.	Signed/Sealed Calculations	B, C(2), C(3), D(1), D(2), D(3), D(4), D(5), D(8), D(9), D(10), D(11)	08/30/16



APPROVED ASSEMBLIES:

Membrane Type: SBS/APP

Deck Type 2I: Steel, Insulated

Deck Description: 18-22 ga. Type B, Grade 33 steel deck attached 6" o.c. with Tek/5 screws to steel supports spaced max. 5 ft. o.c. Deck side laps are attached with Tek/1 screws spaced 20" o.c.

This Tested Assembly has been analyzed for allowable deck stress. See Deck Stress Analysis Table.

System Type B: Base layer of insulation mechanically fastened, top layer adhered with approved asphalt. Membranes subsequently adhered to insulation.

All General and System limitations apply.

One or more layers of any of the following insulations:

<u>Base Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
ACFoam-II, Polytherm, ACFoam-III, H-Shield, Polytherm-H, ENRGY 3, ISO 95+ GL, H-Shield CG, Multi-Max FA-3 Minimum 1.5" thick	1, 2 with 3, 4	1:1.33 ft ²

Note: Base layer shall be mechanically attached with fasteners and density described. Insulation panels listed are minimum sizes and dimensions; if larger panels are used the number of fasteners per board shall be increased maintaining the same fastener density (See Roofing Application Standard RAS 117 for fastening details).

<u>Top Insulation Layer (Coverboard)</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
Structodek High Density Fiberboard Roof Insulation Minimum ½" thick	N/A	N/A
FescoBoard Minimum ¾" thick	N/A	N/A

Note: Apply top layer of insulation in a full mopping of any approved mopping asphalt within the EVT range and at a rate of 20-40 lbs/100 ft². Please refer to Roofing Application Standard RAS 117 for insulation attachment. Insulation listed as Base Layer only shall be used only as base layers with a second layer of approved top layer insulation installed as the final membrane substrate. Composite insulation panels may be used as a top layer placed with the polyisocyanurate side facing down.

Base Sheet: *(Optional if using ply sheet in hot asphalt)*
One or more plies of Elastobase, Polyglass HT Base 650, XtraFlex SBS Glass Base or XtraFlex SBS HT Base 650 adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.

Ply Sheet:	<p><i>(Optional if using base sheet in hot asphalt)</i></p> <p>One or more plies of Polybond, Polyflex or XtraFlex APP S torch applied.</p> <p>Or</p> <p>One ply of Elastobase, Elastobase P, Elastoflex S6, Elastoflex V, Elastoflex V 2.5, Polyglass HT Base 650, XtraFlex SBS Glass Base, XtraFlex SBS Glass Interply, XtraFlex SBS HT Base 650, XtraFlex SBS Poly Base, one or more plies of Type IV or VI ply sheet adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.</p>
Membrane:	<p>One ply of Polybond, Polybond G, Polyflex, Polyflex G, Polyflex G FR, Polyfresko G, Polyfresko G FR, XtraFlex APP G, XtraFlex APP S or XtraFlex Kool APP G torch applied.</p> <p>Or</p> <p>One ply of Elastoflex S6 G, Elastoflex S6 G FR, Elastoflex VG, Elastoflex VG FR, Elastoshield TSG, or Elastoshield TSG FR, Polyfresko G SBS, Polyfresko G SBS FR or XtraFlex SBS Poly G torch or hot asphalt applied.</p>
Surfacing: (Optional)	<p>Install one of the approved surfacing products listed in Table 4 to obtain desired coating or required fire classification.</p>
Maximum Design Pressure:	<p>-90 psf; (See General Limitation #7.)</p>

Membrane Type: SBS/APP
Deck Type 2I: Steel, Insulated
Deck Description: 18-22 ga. Type WR, Grade 33 Steel Deck attached 6" o.c. with Traxx 5 screws to steel supports spaced max. 6 ft. o.c. Deck side laps are attached with Traxx 1 screws spaced 24" o.c.

This Tested Assembly has been analyzed for allowable deck stress. See Deck Stress Analysis Table.

System Type C(1): All layers of insulation are mechanically attached to roof deck. Membrane is subsequently adhered to insulation.

All General and System limitations apply.

One or more layers of any of the following insulations:

<u>Base Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
Polytherm, Polytherm-H, ACFoam-II, H-Shield, ISO 95 +GL, ENRGY 3 Minimum 2" thick	N/A	N/A
<u>Top Insulation Layer (Coverboard)</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
SECUROCK Gypsum-Fiber Roof Board Minimum 1/2" thick	5 (#12 or #14) with 6; 3 (#12 or #14) with 4	1:1.78 ft²

Note: All layers of insulation shall be mechanically attached using the fastener density listed above. The insulation panels listed are minimum sizes and dimensions; if larger panels are used, the number of fasteners shall be increased maintaining the same fastener density.

Base Sheet: *(Optional if using ply sheet in hot asphalt)*
 One or more plies of Polybond, Polyflex or XtraFlex APP S torch applied.
 Or
 One or more plies of Elastobase P, Elastoflex S6, Elastoflex V, Polyglass HT Base 650, XtraFlex SBS Glass Interply, XtraFlex SBS HT Base 650 or XtraFlex SBS Poly Base, adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.

Ply Sheet: *(Optional if using base sheet in hot asphalt)*
 One or more plies of Polybond, Polyflex or XtraFlex APP S torch applied.
 Or
 One ply of Elastobase P, Elastoflex S6, Elastoflex V, Polyglass HT Base 650, XtraFlex SBS Glass Interply, XtraFlex SBS HT Base 650 or XtraFlex SBS Poly Base adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.



Membrane:	One ply of Elastoflex S6 G, Elastoflex S6 G FR, Elastoshield TSG, Elastoshield TSG FR, Polybond G, Polyflex G, Polyflex G FR, Polyfresko G, Polyfresko G FR, Polyfresko G SBS, Polyfresko G SBS FR, XtraFlex APP G, XtraFlex Kool APP G or XtraFlex SBS Poly G torch or hot asphalt applied.
Surfacing: (Optional)	Install one of the approved surfacing products listed in Table 4 to obtain desired coating or required fire classification.
Maximum Design Pressure:	-60 psf; (See General Limitation #7.)



Membrane Type: SBS/APP

Deck Type 2I: Steel, Insulated

Deck Description: 18-22 ga. Type B, Grade 33 steel deck attached 6" o.c. with Tek/5 screws to steel supports spaced max. 5 ft. o.c. Deck side laps are attached with Tek/1 screws spaced 20" o.c.

This Tested Assembly has been analyzed for allowable deck stress. See Deck Stress Analysis Table.

System Type C(2): All layers of insulation are mechanically attached to roof deck. Membrane is subsequently adhered to insulation.

All General and System limitations apply.

One or more layers of any of the following insulations:

<u>Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
ACFoam-II, Polytherm, ACFoam-III, H-Shield, Polytherm-H, ENRGY 3, ISO 95+ GL, H-Shield CG, Multi-Max FA-3 Minimum 1.5" thick	1, 3 with or 13	1:1.33 ft ²

Note: All layers of insulation shall be mechanically attached using the fastener density listed above. The insulation panels listed are minimum sizes and dimensions; if larger panels are used, the number of fasteners shall be increased maintaining the same fastener density. Insulation fasteners shall be tested for withdrawal resistance in compliance with Testing Application Standard TAS 105 to confirm compliance with the wind load requirements. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Base Sheet: One or more plies of Elastoflex SA V, Elastoflex SA V PLUS, Elastoflex SA V FR, Elastoflex SA V PLUS FR or XtraFlex SBS Base SA, self-adhered to the insulation.

Membrane: One or more plies of Polybond, Polybond G, Polyflex, Polyflex G, Polyflex G FR, Polyfresko G, Polyfresko G FR, XtraFlex APP G, XtraFlex APP S or XtraFlex Kool APP G torch applied.

Or

One ply of Elastoflex S6 G, Elastoflex S6 G FR, Elastoshield TSG, Elastoshield TSG FR, Polyfresko G SBS, Polyfresko G SBS FR or XtraFlex SBS Poly G torch or hot asphalt.

**Surfacing:
(Optional)** Install one of the approved surfacing products listed in Table 4 to obtain desired coating or required fire classification.

**Maximum Design
Pressure:** -82.5 psf; (See General Limitation #7.)



Membrane Type: SBS/APP

Deck Type 2I: Steel, Insulated

Deck Description: 18-22 ga. Type B, Grade 33 steel deck attached 6" o.c. with Tek/5 screws to steel supports spaced max. 5 ft. o.c. Deck side laps are attached with Tek/1 screws spaced 20" o.c.

This Tested Assembly has been analyzed for allowable deck stress. See Deck Stress Analysis Table.

System Type C(3): All layers of insulation are mechanically attached to roof deck. Membrane is subsequently adhered to insulation.

All General and System limitations apply.

One or more layers of any of the following insulations:

<u>Base Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
ENRGY 3, H-Shield, Polytherm-H, Multi-Max FA-3, EnergyGuard Polyiso Insulation, ACFoam-II, Polytherm		
Minimum 1.5" thick	N/A	N/A
<u>Top Insulation Layer (Coverboard)</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
Structodek High Density Fiberboard Roof Insulation		
Minimum 1/2" thick	1, 2 with 3, 4	1:1.33 ft ²
DensDeck, DensDeck Prime, SECUROCK Gypsum-Fiber Roof Board		
Minimum 1/4" thick	1, 2 with 3, 4	1:1.33 ft ²

Note: All layers of insulation shall be mechanically attached using the fastener density listed above. The insulation panels listed are minimum sizes and dimensions; if larger panels are used, the number of fasteners shall be increased maintaining the same fastener density.

Base Sheet: *(Optional if using ply sheet in hot asphalt)*
One or more plies of Elastobase, Polyglass HT Base 650, XtraFlex SBS Glass Base or XtraFlex SBS HT Base 650 adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.

Ply Sheet: *(Optional if using base sheet in hot asphalt)*
One or more plies of Polybond, Polyflex or XtraFlex APP S torch applied.

Or

One ply of Elastobase, Elastobase P, Elastoflex S6, Elastoflex V, Elastoflex V 2.5, Polyglass HT Base 650, XtraFlex SBS Glass Base, XtraFlex SBS Glass Interply, XtraFlex SBS HT Base 650, XtraFlex SBS Poly Base, one to more plies of Type IV or VI ply sheet adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.

Membrane: One ply of Polybond, Polybond G, Polyflex, Polyflex G, Polyflex G FR, Polyfresko G, Polyfresko G FR, XtraFlex APP G, XtraFlex APP S or XtraFlex Kool APP G torch applied.

Or

One ply of Elastoflex S6 G, Elastoflex S6 G FR, Elastoflex VG, Elastoflex VG FR, Elastoshield TSG, Elastoshield TSG FR, Polyfresko G SBS, Polyfresko G SBS FR or XtraFlex SBS Poly G torch or hot asphalt applied.

**Surfacing:
(Optional)**

Install one of the approved surfacing products listed in Table 4 to obtain desired coating or required fire classification.

**Maximum Design
Pressure:**

-82.5 psf; (See General Limitation #7.)



Membrane Type: SBS/APP

Deck Type 2I: Steel, Insulated

Deck Description: 18-22 ga. Type B, Grade 40 steel deck attached 6" o.c. with 5/8" puddle welds to steel supports spaced max. 6 ft. o.c. Deck side laps are attached with Tek/1 screws spaced 20" o.c.

This Tested Assembly has been analyzed for allowable deck stress. See Deck Stress Analysis Table.

System Type D(1): All insulation is loosed laid with preliminary attachment to deck. Base sheet is subsequently mechanically fastened through insulation to the roof deck.

All General and System limitations apply.

One or more layers of any of the following insulations:

<u>Insulation Layer</u>	<u>Insulation Fasteners</u> (Table 3)	<u>Fastener</u> <u>Density/ft²</u>
ENRGY 3, H-Shield, Polytherm-H, Multi-Max FA-3, EnergyGuard Polyiso Insulation, AC Foam-II, Polytherm Minimum 1" thick	N/A	N/A

Note: All insulation shall have preliminary attachment, prior to the installation of the roofing membrane at a minimum application rate of two fasteners per board for insulation boards having no dimension greater than 4 ft., and four fasteners for any insulation board having no dimension greater than 8 ft.

Base Sheet: One ply of Elastobase, Elastoflex S6, Polyglass HT Base 650, XtraFlex SBS Glass Base or XtraFlex SBS HT Base 650 fastened to the deck as described below:

Fastening: Attach base sheet using Trufast #15 EHD Fasteners with Trufast 2.4" Scoop Seam Plates spaced 12" o.c. in a 5" heat welded side lap.

Membrane: One ply of Elastoflex S6 G, Elastoflex S6 G FR, Polyfresko G SBS, Polyfresko G SBS FR or XtraFlex SBS Poly G torch or hot asphalt applied.

**Surfacing:
(Optional)** Install one of the approved surfacing products listed in Table 4 to obtain desired coating or required fire classification.

**Maximum Design
Pressure:** -45.0 psf; (See General Limitation #7.)



Membrane Type: SBS/APP

Deck Type 2I: Steel, Insulated

Deck Description: 18-22 ga. Type B, Grade 40 steel deck attached 6" o.c. with 5/8" puddle welds to steel supports spaced max. 6 ft. o.c. Deck side laps are attached with Tek/1 screws spaced 20" o.c.

This Tested Assembly has been analyzed for allowable deck stress. See Deck Stress Analysis Table.

System Type D(2): All insulation is loosed laid with preliminary attachment to deck. Base sheet is subsequently mechanically fastened through insulation to the roof deck.

All General and System limitations apply.

One or more layers of any of the following insulations:

<u>Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
Miami-Dade Approved Lightweight Concrete Minimum 2.0" thick, Minimum 300 psi.	N/A	N/A

Note: Load capacity of the structural substrate must be verified for the additional load of the LWC. The LWC must be properly vented.

Base Sheet: One ply of Elastobase, Elastoflex S6, Polyglass HT Base 650, XtraFlex SBS Glass Base or XtraFlex SBS HT Base 650 fastened to the deck as described below:

Fastening: Attach base sheet using Trufast #15 EHD Fasteners with Trufast 2.4" Scoop Seam Plates spaced 12" o.c. in a 5" heat welded side lap.

Membrane: One ply of Elastoflex S6 G, Elastoflex S6 G FR, Polyfresko G SBS, Polyfresko G SBS FR or XtraFlex SBS Poly G torch or hot asphalt applied.

**Surfacing:
(Optional)** Install one of the approved surfacing products listed in Table 4 to obtain desired coating or required fire classification.

**Maximum Design
Pressure:** -45.0 psf; (See General Limitation #7.)



Membrane Type: SBS/APP

Deck Type 2I: Steel, Insulated

Deck Description: Min. 18-22 ga. Type B, Yield Strength 50.6 ksi. steel deck attached 6" o.c. with 5/8" puddle welds to steel supports spaced max. 6 ft. o.c. deck side laps are attached with Tek/1 screws spaced 24" o.c.

This Tested Assembly has been analyzed for allowable deck stress. See Deck Stress Analysis Table.

System Type D(3): All insulation is loosed laid with preliminary attachment to deck. Base sheet is subsequently mechanically fastened through insulation to the roof deck.

All General and System limitations apply.

One or more layers of any of the following insulations:

<u>Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
ENRGY 3, H-Shield, Polytherm-H, Multi-Max FA-3, EnergyGuard Polyiso Insulation, ACFoam-II, Polytherm Minimum 1" thick	N/A	N/A

Note: All insulation shall have preliminary attachment, prior to the installation of the roofing membrane at a minimum application rate of two fasteners per board for insulation boards having no dimension greater than 4 ft., and four fasteners for any insulation board having no dimension greater than 8 ft.

Base Sheet: One ply of Elastobase, Elastoflex S6, Polyglass HT Base 650, XtraFlex SBS Glass Base or XtraFlex SBS HT Base 650 fastened to the deck as described below:

Fastening #1: Attach base sheet using Trufast #15 EHD Fasteners with Trufast 2-3/4" Barbed Metal Seam Plate spaced 12" o.c. in a 5" heat welded or torch sealed side lap.
(Maximum Design Pressure –45.0 psf – General Limitation #7.)

Fastening #2: Attach base sheet using Trufast #15 EHD Fasteners with Trufast 2-3/4" Barbed Metal Seam Plate spaced 6" o.c. in a 5" heat welded or torch sealed side lap.
(Maximum Design Pressure –60.0 psf – General Limitation #7.)

**Ply Sheet:
(Optional)** One ply of Elastobase, Elastobase P, Elastoflex S6, Elastoflex V, Polyglass HT Base 650, XtraFlex SBS Glass Base, XtraFlex SBS Glass Interply, XtraFlex SBS HT Base 650 or XtraFlex SBS Poly Base torch applied

Membrane: One ply of Elastoflex S6 G, Elastoflex S6 G FR, Polyfresko G SBS, Polyfresko G SBS FR or XtraFlex SBS Poly G torch or hot asphalt applied.

**Surfacing:
(Optional)** Install one of the approved surfacing products listed in Table 4 to obtain desired coating or required fire classification.

Maximum Design Pressure: See Fastening Options Above



Membrane Type: SBS/APP

Deck Type 2I: Steel, Insulated

Deck Description: 18-22 ga. Type B, Grade 33 steel deck attached 6" o.c. with Tek/5 screws to steel supports spaced max. 5 ft. o.c. Deck side laps are attached with Tek/1 screws spaced 20" o.c.

This Tested Assembly has been analyzed for allowable deck stress. See Deck Stress Analysis Table.

System Type D(4): All insulation is loosed laid with preliminary attachment to deck. Base sheet is subsequently mechanically fastened through insulation to the roof deck.

All General and System limitations apply.

One or more layers of any of the following insulations:

<u>Base Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
ENRGY 3, H-Shield, Polytherm-H, Multi-Max FA-3, EnergyGuard Polyiso Insulation Minimum 1" thick	N/A	N/A
<u>Top Insulation Layer (Optional)</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
FescoBoard Minimum 3/4" thick	N/A	N/A
Structodek High Density Fiberboard Minimum 1/2" thick	N/A	N/A
DensDeck, DensDeck Prime, SECUROCK Gypsum-Fiber Roof Board Minimum 1/4" thick	N/A	N/A

Note: All insulation shall have preliminary attachment, prior to the installation of the roofing membrane at a minimum application rate of two fasteners per board for insulation boards having no dimension greater than 4 ft., and four fasteners for any insulation board having no dimension greater than 8 ft.

Base Sheet: One ply of Elastobase, Elastobase P, Polyglass APP Base*, Polyglass G2 Base, Polyglass HT Base 650, XtraFlex SBS Glass Base or XtraFlex SBS HT Base 650 fastened to the deck as described below:
*Requires torch-applied ply or cap sheet.

Fastening: Attach base sheet using SFS Dekfast 14 or Dekfast 15 HS fasteners with with Dekfast Galvalume Steel Hex Plates or Polygrip Fastener #14 or Polygrip Fastener #15 with Polygrip Hex Plates or Trufast #14 HD or Trufast #15 EHD Fasteners with Trufast 3" Metal Insulation Plate 12" o.c. in a 4" lap and 12" o.c. in two equally spaced staggered rows in the center of the sheet.



Ply Sheet: (Optional)	One ply of Polybond, Polyflex or XtraFlex APP S torch applied. Or One ply of Elastobase, Elastobase P, Elastoflex S6, Elastoflex V, Elastoflex V 2.5, Polyglass HT Base 650, XtraFlex SBS Glass Base, XtraFlex SBS Glass Interply, XtraFlex SBS HT Base 650, XtraFlex SBS Poly Base, one or more plies of Type IV or VI ply sheet adhered in full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.
Membrane:	One ply of Polybond, Polybond G, Polyflex, Polyflex G, Polyflex G FR, Polyfresko G, Polyfresko G FR, XtraFlex APP G, XtraFlex APP S or XtraFlex Kool APP G torch applied. Or One ply of Elastoflex S6 G, Elastoflex S6 G FR, Elastoflex VG, Elastoflex VG FR, Elastoshield TSG, Elastoshield TSG FR, Polyfresko G SBS, Polyfresko G SBS FR, XtraFlex SBS Poly G, torch or hot asphalt applied.
Surfacing: (Optional)	Install one of the approved surfacing products listed in Table 4 to obtain desired coating or required fire classification.
Maximum Design Pressure:	-52.5 psf; (See General Limitation #7.)



Membrane Type:	SBS/APP
Deck Type 2I:	Steel, Insulated
Deck Description:	18-22 ga. Type B, Grade C steel deck attached 6" o.c. with Tek/5 screws to steel supports spaced max. 5 ft. o.c. Deck side laps are attached with Tek/1 screws spaced 20" o.c. This Tested Assembly has been analyzed for allowable deck stress. See Deck Stress Analysis Table.
System Type D(5)	All insulation is loosely laid with preliminary attachment to deck. Base sheet is subsequently mechanically fastened through insulation to the roof deck.

All General and System limitations apply.

One or more layers of any of the following insulations:

<u>Base Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
Miami-Dade Approved Lightweight Concrete Minimum 2.0" thick, Minimum 300 psi.	N/A	N/A

Note: Load capacity of the structural substrate must be verified for the additional load of the LWC. The LWC must be properly vented.

Base Sheet:	One ply of Polybond, Polyglass APP Base* or Polyglass G2 Base fastened to the deck as described below: *Requires torch-applied ply or cap sheet.
Fastening:	Attach base sheet using SFS Dekfast 14 or Dekfast 15 HS fasteners with with Dekfast Galvalume Steel Hex Plates or Polygrip Fastener #14 or Polygrip Fastener #15 with Polygrip Hex Plates or Trufast #14 HD or Trufast #15 EHD Fasteners with Trufast 3" Metal Insulation Plate 12" o.c. in a 4" lap and 12" o.c. in two equally spaced staggered rows in the center of the sheet.
Membrane:	One ply of Polybond, Polyflex G FR, Polyfresko G FR or XtraFlex APP G torch applied. Or One ply of Elastoflex S6 G, Elastoflex S6 G FR, Elastoflex VG, Elastoflex VG FR, Elastoshield TSG, Elastoshield TSG FR, Polyfresko G SBS, Polyfresko G SBS FR or XtraFlex SBS Poly G torch or hot asphalt applied.
Surfacing: (Optional)	Install one of the approved surfacing products listed in Table 4 to obtain desired coating or required fire classification.
Maximum Design Pressure:	-82.5 psf; (See General Limitation #7.)



Membrane Type: SBS/APP

Deck Type 2I: Steel, Insulated

Deck Description: Minimum 22 gage, Type WR, Grade 80 steel deck fastened to steel support at a maximum span of 6 feet o.c. Steel deck shall be fastened with minimum ITW Buildex Traxx/5 at a maximum spacing of 6 inches o.c. Side laps shall be fastened with ITW Buildex Traxx/1 at a maximum spacing of 24 inches o.c.

This Tested Assembly has been analyzed for allowable deck stress. See Deck Stress Analysis Table.

System Type D(6): All insulation is loosely laid with preliminary attachment to deck. Base sheet is subsequently mechanically fastened through insulation to the roof deck.

All General and System limitations apply.

One or more layers of any of the following insulations:

<u>Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
ACFoam-II, Polytherm, ACFoam-III, H-Shield, Polytherm-H, ACFoam Composite, Polytherm Composite Minimum 1.5" thick	N/A	N/A
Structodek High Density Fiberboard Minimum 1" thick	N/A	N/A
FescoBoard Minimum 3/4" thick	N/A	N/A

Note: Top layer shall have preliminary attachment, prior to installation of the base sheet, at an application rate of two fasteners per board for insulation boards having no dimension greater than 4 ft., and four fasteners for any insulation board having no dimension greater than 8 ft. All layers of insulation and base sheet shall be simultaneously fastened. See base sheet below for fasteners and density.

Base Sheet: One ply of Polybond, Polyflex or XtraFlex APP S mechanically fastened to the deck as described below:

Fastening: Attach base sheet using Polygrip Fastener #14 with Polygrip Hex Plates or Dekfast 14 fasteners with Dekfast Galvalume Steel Hex Plates spaced 12" o.c. in a minimum 6" wide side lap. The side lap is either torch or hot air welded closed.

Membrane: One ply of Polybond, Polybond G, Polyflex, Polyflex G, Polyflex G FR, Polyfresko G, Polyfresko G FR, XtraFlex APP G, XtraFlex APP S or XtraFlex Kool APP G torch applied.

**Surfacing:
(Optional)** Install one of the approved surfacing products listed in Table 4 to obtain desired coating or required fire classification.

**Maximum Design
Pressure:** -82.5 psf; (See General Limitation #7.)



Membrane Type: SBS/APP

Deck Type 2I: Steel, Insulated

Deck Description: Minimum 22 gage, Type WR, Grade 80 steel deck fastened to steel support at a maximum span of 6 feet o.c. Steel deck shall be fastened with minimum ITW Buildex Traxx/5 at a maximum spacing of 6 inches o.c. Side laps shall be fastened with ITW Buildex Traxx/1 at a maximum spacing of 24 inches o.c.

This Tested Assembly has been analyzed for allowable deck stress. See Deck Stress Analysis Table.

System Type D(7): All insulation is loosed laid with preliminary attachment to deck. Base sheet is subsequently mechanically fastened through insulation to the roof deck.

All General and System limitations apply.

One or more layers of any of the following insulations:

<u>Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
Miami-Dade Approved Lightweight Concrete Minimum 2.0" thick, Minimum 300 psi.	N/A	N/A

Note: Load capacity of the structural substrate must be verified for the additional load of the LWC. The LWC must be properly vented.

Base Sheet: One ply of Polybond, Polyflex or XtraFlex APP S mechanically fastened to the deck as described below:

Fastening: Attach base sheet using Polygrip Fastener #14 with Polygrip Hex Plates or Dekfast 14 fasteners with Dekfast Galvalume Steel Hex Plates spaced 12" o.c. in a minimum 6" wide side lap. The side lap is either torch or hot air welded closed.

Membrane: One ply of Polybond, Polybond G, Polyflex, Polyflex G, Polyfresko G, XtraFlex APP S or XtraFlex Kool APP G torch applied.

**Surfacing:
(Optional)** Install one of the approved surfacing products listed in Table 4 to obtain desired coating or required fire classification.

**Maximum Design
Pressure:** -82.5 psf; (See General Limitation #7.)



Membrane Type:	SBS/APP
Deck Type 2I:	Steel, Insulated
Deck Description:	18-22 ga. Type B, Grade 40 steel deck attached 6" o.c. with Tek/5 screws to steel supports spaced max. 5 ft. o.c. Deck side laps are attached with Tek/1 screws spaced 20" o.c. This Tested Assembly has been analyzed for allowable deck stress. See Deck Stress Analysis Table.
System Type D(8):	All insulation is loosed laid with preliminary attachment to deck. Base sheet is subsequently mechanically fastened through insulation to the roof deck.

All General and System limitations apply.

One or more layers of any of the following insulations:

<u>Base Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
ENRGY 3, H-Shield, Polytherm-H, Multi-Max FA-3, EnergyGuard Polyiso Insulation Minimum 1.5" thick	N/A	N/A
<u>Top Insulation Layer (Optional)</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
FescoBoard Minimum ¾" thick	N/A	N/A
Structodek High Density Fiberboard Minimum ½" thick	N/A	N/A
DensDeck, DensDeck Prime, SECUROCK Gypsum-Fiber Roof Board Minimum ¼" thick	N/A	N/A

Note: All insulation shall have preliminary attachment, prior to the installation of the roofing membrane at a minimum application rate of two fasteners per board for insulation boards having no dimension greater than 4 ft., and four fasteners for any insulation board having no dimension greater than 8 ft.

Base Sheet:	One ply of Polyflex or XtraFlex APP S fastened to the deck as described below:
Fastening:	Attach base sheet using Polygrip Fastener #15 or SFS Dekfast 15 HS and Dekfast Isofast IF-2.375-AT Plates spaced 12" o.c. in a 5" heat welded side lap.
Ply Sheet: (Optional)	One ply of Polyflex, XtraFlex APP S or Polybond torch applied.
Membrane:	One ply of Polybond, Polybond G, Polyflex, Polyflex G, Polyflex G FR, Polyfresko G, Polyfresko G FR, XtraFlex APP G, XtraFlex APP S or XtraFlex Kool APP G torch applied. Or One ply of Elastoflex S6 G, Elastoflex S6 G FR, Elastoshield TSG, Elastoshield TSG FR, Polyfresko G SBS, Polyfresko G SBS FR or XtraFlex SBS Poly G torch applied.



**Surfacing:
(Optional)**

Install one of the approved surfacing products listed in Table 4 to obtain desired coating or required fire classification.

**Maximum Design
Pressure:**

-82.5 psf; (See General Limitation #7.)



Membrane Type: SBS/APP

Deck Type 2I: Steel, Insulated

Deck Description: Min. 18-22 ga. Type B, Yield Strength 50.6 ksi. steel deck attached 6" o.c. with 5/8" puddle welds to steel supports spaced max. 6 ft. o.c. deck side laps are attached with Tek/1 screws spaced 24" o.c.

This Tested Assembly has been analyzed for allowable deck stress. See Deck Stress Analysis Table.

System Type D(9): All insulation is loosed laid with preliminary attachment to deck. Base sheet is subsequently mechanically fastened through insulation to the roof deck.

All General and System limitations apply.

One or more layers of any of the following insulations:

<u>Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
ENRGY 3, H-Shield, Polytherm-H, Multi-Max FA-3, EnergyGuard Polyiso Insulation, AC Foam-II, Polytherm Minimum 1" thick	N/A	N/A

Note: All insulation shall have preliminary attachment, prior to the installation of the roofing membrane at a minimum application rate of two fasteners per board for insulation boards having no dimension greater than 4 ft., and four fasteners for any insulation board having no dimension greater than 8 ft.

Base Sheet: One ply of Elastobase, Polyglass HT Base 650, XtraFlex SBS Glass Base or XtraFlex SBS HT Base 650 fastened to the deck as described below:

Fastening #1: Attach base sheet using Trufast #15 EHD Fasteners with Trufast 2.4 Barbed Metal Seam Plate or Trufast 2-3/4" Barbed Metal Seam Plate or Trufast 2.4" Scoop Seam Plates or Dekfast 15 HS fasteners with Dekfast Galvalume Steel Round 2 3/8" 20-Ga Barbed Plates spaced 12" o.c. in a 5" heat welded or torch sealed side lap.
(Maximum Design Pressure –82.5 psf – General Limitation #7.)

Fastening #2: Attach base sheet using Trufast #15 EHD Fasteners with Trufast 2.4 Barbed Metal Seam Plate or Trufast 2-3/4" Barbed Metal Seam Plate or Trufast 2.4" Scoop Seam Plates or Dekfast 15 HS fasteners with Dekfast Galvalume Steel Round 2 3/8" 20-Ga Barbed Plates spaced 6" o.c. in a 5" heat welded or torch sealed side lap.
(Maximum Design Pressure –97.5 psf – General Limitation #7.)

**Ply Sheet:
(Optional)** One ply of Elastobase, Elastobase P, Elastoflex S6, Elastoflex V, Polyglass HT Base 650, XtraFlex SBS Glass Base, XtraFlex SBS Glass Interply, XtraFlex SBS HT Base 650 or XtraFlex SBS Poly Base torch applied

Membrane: One ply of Elastoflex S6 G, Elastoflex S6 G FR, Polyfresko G SBS, Polyfresko G SBS FR or XtraFlex SBS Poly G torch or hot asphalt applied.



Surfacing: (Optional)	Install one of the approved surfacing products listed in Table 4 to obtain desired coating or required fire classification.
Maximum Design Pressure:	See Fastening Options Above



Membrane Type: SBS/APP

Deck Type 2I: Steel, Insulated

Deck Description: 18-22 ga. Type B, Grade 33 steel deck attached 6" o.c. with Tek/5 screws to steel supports spaced max. 5 ft. o.c. Deck side laps are attached with Tek/1 screws spaced 20" o.c.

This Tested Assembly has been analyzed for allowable deck stress. See Deck Stress Analysis Table.

System Type D(10): All insulation is loosed laid with preliminary attachment to deck. Base sheet is subsequently mechanically fastened through insulation to the roof deck.

All General and System limitations apply.

One or more layers of any of the following insulations:

<u>Base Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
ENRGY 3, H-Shield, Polytherm-H, Multi-Max FA-3, EnergyGuard Polyiso Insulation		
Minimum 1" thick	N/A	N/A
<u>Top Insulation Layer (Optional)</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
FescoBoard		
Minimum 3/4" thick	N/A	N/A
Structodek High Density Fiberboard		
Minimum 1/2" thick	N/A	N/A
Dens-Deck, Dens Deck Prime, SECUROCK Gypsum-Fiber Roof Board		
Minimum 1/4" thick	N/A	N/A

Note: All insulation shall have preliminary attachment, prior to the installation of the roofing membrane at a minimum application rate of two fasteners per board for insulation boards having no dimension greater than 4 ft., and four fasteners for any insulation board having no dimension greater than 8 ft.

Base Sheet: One ply of Polybond, Polyflex or XtraFlex APP S fastened to the deck as described below:

Fastening: Attach base sheet using SFS Dekfast 12 Fasteners with Dekfast Galvalume Steel Hex plates or Polygrip Fasteners #12 with Polygrip Hex Plates or OMG #14 Roofgrip with Flat Bottom Metal Plates spaced 12" o.c. in a 4" lap and 18" o.c. in two equally spaced staggered rows in the center of the sheet.



Ply Sheet: (Optional)	<p>One ply of Polybond, Polyflex or XtraFlex APP S torch applied.</p> <p>Or</p> <p>One ply of Elastobase, Elastobase P, Elastoflex S6, Elastoflex V, Elastoflex V 2.5, Polyglass HT Base 650, XtraFlex SBS Glass Base, XtraFlex SBS Glass Interply, XtraFlex SBS HT Base 650, XtraFlex SBS Poly Base, one or more plies of Type IV or VI ply sheet adhered in full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.</p>
Membrane:	<p>One ply of Polybond, Polybond G, Polyflex, Polyflex G, Polyflex G FR, Polyfresko G, Polyfresko G FR, XtraFlex APP G, XtraFlex APP S or XtraFlex Kool APP G torch applied.</p> <p>Or</p> <p>One ply of Elastoflex S6 G, Elastoflex S6 G FR, Elastoshield TSG, Elastoshield TSG FR, Polyfresko G SBS, Polyfresko G SBS FR or XtraFlex SBS Poly G torch or hot asphalt applied.</p>
Surfacing: (Optional)	<p>Install one of the approved surfacing products listed in Table 4 to obtain desired coating or required fire classification.</p>
Maximum Design Pressure:	<p>-112.5 psf; (See General Limitation #7.)</p>



Membrane Type: SBS/APP

Deck Type 2I: Steel, Insulated

Deck Description: 18-22 ga. Type B, Grade 33 steel deck attached 6" o.c. with Tek/5 screws to steel supports spaced max. 5 ft. o.c. Deck side laps are attached with Tek/1 screws spaced 20" o.c.

This Tested Assembly has been analyzed for allowable deck stress. See Deck Stress Analysis Table.

System Type D(11): All insulation is loosed laid with preliminary attachment to deck. Base sheet is subsequently mechanically fastened through insulation to the roof deck.

All General and System limitations apply.

One or more layers of any of the following insulations:

<u>Base Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
Miami-Dade Approved Lightweight Concrete Minimum 2.0" thick, Minimum 300 psi.	N/A	N/A

Note: Load capacity of the structural substrate must be verified for the additional load of the LWC. The LWC must be properly vented.

Base Sheet: One ply of Polybond, Polyflex or XtraFlex APP S fastened to the deck as described below:

Fastening: Attach base sheet using SFS Dekfast 12 Fasteners with Dekfast Galvalume Steel Hex plates or Polygrip Fasteners #12 with Polygrip Hex Plates or OMG #14 Roofgrip with Flat Bottom Metal Plates spaced 12" o.c. in a 4" lap and 18" o.c. in two equally spaced staggered rows in the center of the sheet.

**Ply Sheet:
(Optional)** One ply of Polybond, Polyflex or XtraFlex APP S torch applied.

Membrane: One ply of Elastoflex S6 G, Elastoflex S6 G FR, Elastoshield TSG FR, Polyfresko G SBS, Polyfresko G SBS FR or XtraFlex SBS Poly G torch or hot asphalt applied.

**Surfacing:
(Optional)** Install one of the approved surfacing products listed in Table 4 to obtain desired coating or required fire classification.

**Maximum Design
Pressure:** -112.5 psf; (See General Limitation #7.)



STEEL DECK SYSTEM LIMITATIONS:

1. If mechanical attachment to the structural deck through the lightweight insulating concrete is proposed, a field withdrawal resistance testing shall be performed to determine equivalent or enhanced fastener patterns and density. All testing and fastening design shall be in compliance with Testing Application Standard TAS 105 and Roofing Application Standard RAS 117; calculations shall be signed and sealed by a Florida Registered Engineer, Architect, or Registered Roof Consultant.
2. For steel deck application where specific deck construction is not referenced: The deck shall be a minimum 22 gage attached with 5/8" puddle welds with weld washers at every flute with maximum deck spans of 5 ft. o.c.

GENERAL LIMITATIONS:

1. Fire classification is not part of this acceptance; refer to a current Approved Roofing Materials Directory for fire ratings of this product.
2. Insulation may be installed in multiple layers. The first layer shall be attached in compliance with Product Control Approval guidelines. All other layers shall be adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq., or mechanically attached using the fastening pattern of the top layer
3. All standard panel sizes are acceptable for mechanical attachment. When applied in approved asphalt, panel size shall be 4' x 4' maximum.
4. An overlay and/or recovery board insulation panel is required on all applications over closed cell foam insulations when the base sheet is fully mopped. If no recovery board is used the base sheet shall be applied using spot mopping with approved asphalt, 12" diameter circles, 24" o.c.; or strip mopped 8" ribbons in three rows, one at each side lap and one down the center of the sheet allowing a continuous area of ventilation. Encircling of the strips is not acceptable. A 6" break shall be placed every 12' in each ribbon to allow cross ventilation. Asphalt application of either system shall be at a minimum rate of 12 lbs./sq.

Note: Spot attached systems shall be limited to a maximum design pressure of -45 psf.

5. Fastener spacing for insulation attachment is based on a Minimum Characteristic Force (F') value of 275 lbf., as tested in compliance with Testing Application Standard TAS 105. If the fastener value, as field-tested, are below 275 lbf. insulation attachment shall not be acceptable.
6. Fastener spacing for mechanical attachment of anchor/base sheet or membrane attachment is based on a minimum fastener resistance value in conjunction with the maximum design value listed within a specific system. Should the fastener resistance be less than that required, as determined by the Building Official, a revised fastener spacing, prepared, signed and sealed by a Florida registered Professional Engineer, Registered Architect, or Registered Roof Consultant may be submitted. Said revised fastener spacing shall utilize the withdrawal resistance value taken from Testing Application Standards TAS 105 and calculations in compliance with Roofing Application Standard RAS 117.
7. Perimeter and corner areas shall comply with the enhanced uplift pressure requirements of these areas. Fastener densities shall be increased for both insulation and base sheet as calculated in compliance with Roofing Application Standard RAS 117. Calculations prepared, signed and sealed by a Florida registered Professional Engineer, Registered Architect, or Registered Roof Consultant **(When this limitation is specifically referred within this NOA, General Limitation #9 will not be applicable.)**
8. All attachment and sizing of perimeter nailers, metal profile, and/or flashing termination designs shall conform to Roofing Application Standard RAS 111 and applicable wind load requirements.
9. The maximum designed pressure limitation listed shall be applicable to all roof pressure zones (i.e. field, perimeters, and corners). Neither rational analysis, nor extrapolation shall be permitted for enhanced fastening at enhanced pressure zones (i.e. perimeters, extended corners and corners). **(When this limitation is specifically referred within this NOA, General Limitation #7 will not be applicable.)**
11. All products listed herein shall have a quality assurance audit in accordance with the Florida Building Code and Rule 61G20-3 of the Florida Administrative Code.

END OF THIS ACCEPTANCE